

IN THE CLAIMS

Please amend the claims as follows as follows:

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1           1.       (original) A peritoneal dialysis system for a patient, comprising:  
2                   a peritoneal dialyzer that utilizes dialysate to remove impurities from the blood of  
3 the patient; and  
4                   a plurality of sorbent devices for regenerating the dialysate, wherein the sorbent  
5 devices are adapted to be worn on the body of a patient.

1           2.       (original) The peritoneal dialysis system of claim 1, wherein the sorbent devices  
2 are connected in series.

1           3.       (original) The peritoneal dialysis system of claim 1, wherein each of the sorbent  
2 devices has a flexible casing adapted to conform to the body contour of the patient.

1           4.       (original) The peritoneal dialysis system of claim 1, wherein the number of  
2 sorbent devices may be varied to reflect different dialysis prescriptions.

1           5.       (original) The peritoneal dialysis system of claim 1, further including a  
2 regenerated dialysate inlet tube leading into the peritoneal dialyzer and a spent dialysate outlet  
3 tube leading out of the peritoneal dialyzer.

1           6..     (original) The peritoneal dialysis system of claim 5, wherein the regenerated  
2     dialysate inlet tube includes a side port for the infusion of additives.

1           7.     (original) The peritoneal dialysis system of claim 6, wherein the additives are  
2     pumped into the dialysate from a plurality of additive reservoirs.

1           8.     (original) The peritoneal dialysis system of claim 6, wherein the rate of infusion  
2     of each additive is controlled electronically.

1           9.     (original) The peritoneal dialysis system of claim 6, wherein the additives are  
2     chosen from the group consisting of: sodium citrate, calcium, potassium and sodium bicarbonate.

1           10.    (original) The peritoneal dialysis system of claim 5, wherein the spent dialysate  
2     tube leads into the plurality of sorbent devices and the regenerated dialysate tube leads out of the  
3     plurality of sorbent devices.

1           11.    (original) The peritoneal dialysis system of claim 1, wherein the sorbent devices  
2     comprise replaceable cartridges.

1           12.    (original) The peritoneal dialysis system of claim 11, wherein the replaceable  
2     cartridges include: activated charcoal, urease, zirconium phosphate, hydrous zirconium oxide  
3     and activated carbon.

1 *a*

13. (original) The peritoneal dialysis system of claim 1, wherein the sorbent devices

2 are connected in parallel.

1 14.-25. (canceled)